

THE SE4JOBS PROJECT: INTERNATIONAL GOOD PRACTICES FOR EMPLOYMENT THROUGH SUSTAINABLE ENERGIES

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«Promoting Employment through RE/EE in MENA»

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The Regional GIZ Project RE-ACTIVATE

- **Interregional & cross-sectoral project** focusing on the nexus between
 - Sustainable energy (both renewable energy & energy efficiency)
 - Socio-economic development (esp. local jobs & value creation)
- Supporting market development, knowhow transfer, and strategy building for employment-intensive applications at the regional (MENA) level plus in three focus countries (Morocco, Tunisia, Egypt)
- Network structure with teams in Rabat, Tunis, Cairo, and Bonn
- Duration: 4 years (2014 – 2017), budget: 5 million EUR



SE4JOBS: A Key Activity of RE-ACTIVATE

- Launched in 2014 by **6 GIZ Projects** dealing with the linkages between sustainable energy and socio-economic development as an expert group and work platform; supported by experts from adelphi and FFU
- Organization of 6 in-house + in-country workshops & trainings so far





What are the objectives of SE4JOBS?

- Help examine and exploit the many forward– and backward linkages between **RE/EE deployment** and **local socio-economic development**, esp. as regards the optimization of employment and value creation
- ...by identifying and analyzing worldwide **“good practices”** and **success models**, especially in developing and emerging countries
- ... by distinguishing **key variables** and **causal relationships** that explain best the trajectories and results of the reference cases
- ... by translating these insights into new, customized **tools and formats for technical assistance and capacity building**: SE4JOBS Toolkit, SE4JOBS Good Practice Studies, SE4JOBS Training Modules...

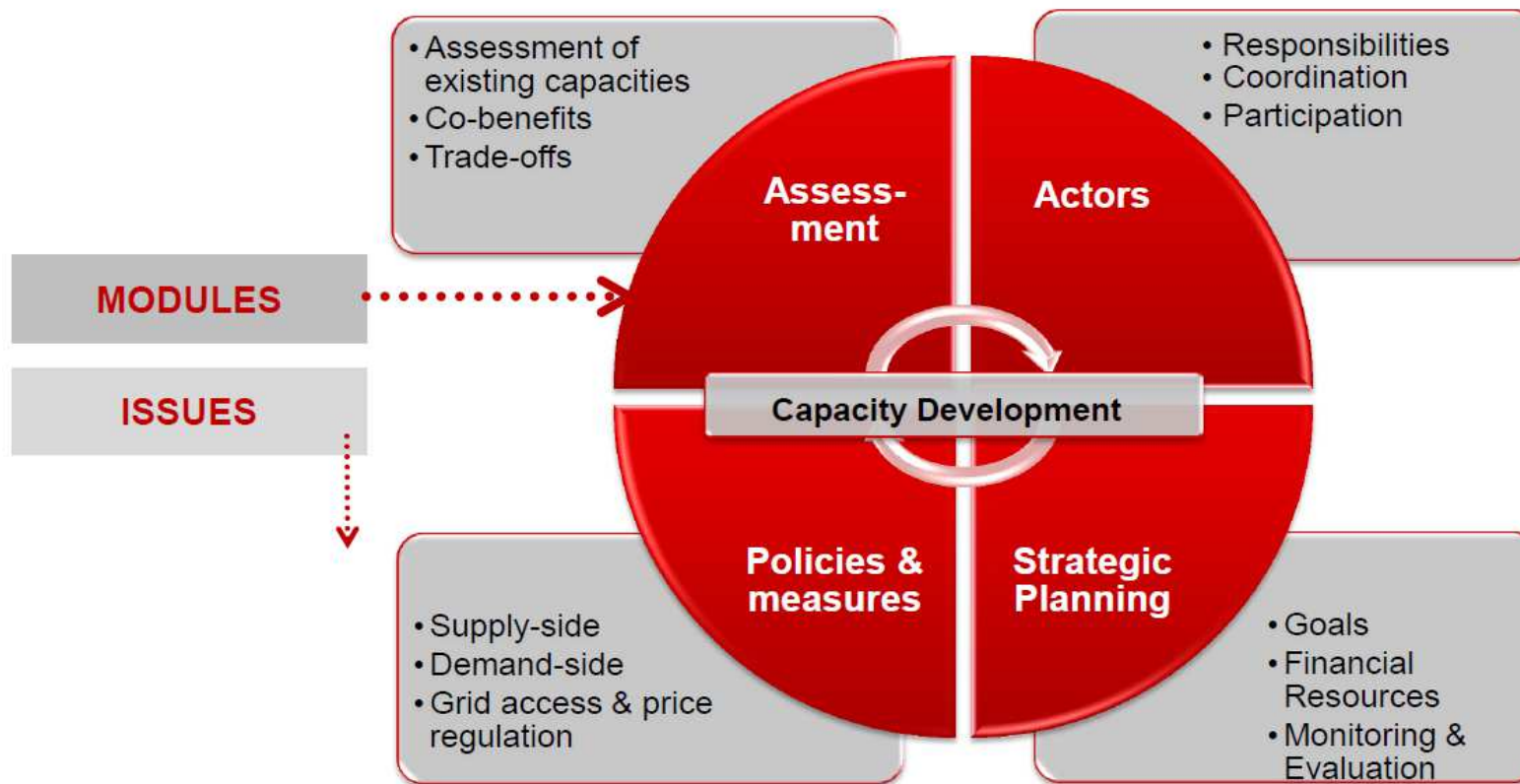


What are the expected outcomes of SE4JOBS?

- The **interdependencies and tradeoffs** that exist between the various technology pathways and policy options are better understood. This leads to more informed and more coherent policies and processes.
- **Complementarities and synergies** can be recognized and harnessed more effectively, incl. via new avenues of stakeholder engagement, a stronger exchange and cooperation across sectors and institutions, a better pooling of resources, and a smarter alignment of policy tools.
- The **quality of the roll-out of RE/EE** is supported, which leads to stronger benefits for and a greater acceptance by local populations.



The policy cycle approach of SE4JOBS





Some Key Results and Recommendations 1

- RE/EE deployment and associated manufacturing & ancillary services are quickly shifting from OECD to developing and emerging countries.
- Some of the latter have gained a key position in these new markets and generate strong socio-economic benefits for their populations.
- The lion's share of new local value and job creation is however still heavily concentrated in a relatively small number of countries.
- At the same time, these new RE/EE tigers feature very different framework conditions and pursue very different approaches.
- The number and range of experiences and approaches that have proven successful and can serve as examples has strongly increased.



Some Key Results and Recommendations 2

- Although there is neither a silver bullet nor a one size fits all solution, some recurring issues have proven crucial and should be considered.
- Only **functioning domestic markets** trigger the necessary investment. These depend on **sound framework conditions** and **adapted support instruments** that stimulate market actors and correct market failures.
- A critical mass of local **stakeholders** must be involved & support the process. These must have the **capacities** to organize & implement a large-scale, cost-effective, reliable and adapted deployment of RE/EE.
- Successful approaches are strongly **contextualized**. Key elements are: strategy, commitment, implementation capacities, capacity building.



Some Key Results and Recommendations 3

- **Functioning markets** require **sound policy frameworks**. Policies are needed to organize the investment-driven RE/EE roll-out and provide for the necessary system integration and stakeholder inclusion.
- Ideally, these policies are based on a **strategy** that connects the potentials and preferences of a society, organizes a roll-out pathway, and mobilizes the needed political, financial and technical support.
- Identifying and communicating socio-economic **co-benefits** for local populations is key to foster social acceptance and political support.
- Recognizing and addressing **trade-offs** and conflicting interests and objectives is also key for designing the right strategies and policies.



Some Key Results and Recommendations 4

- Good policies are **ambitious & visible**, yet also **realistic & adapted**.
- ✓ They are based on a thorough assessment of one's potentials and challenges as well as on the strengths and weaknesses one has.
- ✓ They are translated into clear and sound goals and targets that are endorsed by the main stakeholders and communicated to the public.
- ✓ They are supported by a broad coalition of relevant stakeholders in politics, business, the media, and civil society.
- ✓ They are accompanied by a corresponding alignment of a country's policies, instruments, resources, and activities.



Some Key Results and Recommendations 4

- **Available tools** for assessment and strategy support: from GIZ: ELMA, EQUIP, CADRE; from others: AILEG, HELIO, IRENA RE
- **Good practice options** for domestic assessment approaches:
 - **China & Mexico:** using ILO methodologies to estimate current and future employment by RE/EE with input-output-tables
 - **South Africa:** using a system dynamics model to estimate employment effects and environmental impacts



Some Key Results and Recommendations 5

- **A larger participation of the local workforce & business community, esp. of MSMEs**, is crucial for stepping up the pace and scope of RE/EE deployment, while bringing down delays and costs linked to it.
- **Actual or prospective local economic actors** (investors, developers, manufacturers, service providers, off-takers...) should be pro-actively supported in correctly identifying and capturing market niches.
- Market segments which exhibit comparatively **low entry barriers** and offer **overaverage employment effects** should be specifically focused
- **Tried-and-tested instruments from other policy fields**, like PSD, local supplier development & business linkage programs, can be used for it



Some Key Results and Recommendations 6

- Good support instruments incentivize RE/EE investments in a non-discriminatory and cost-effective way.
- ✓ They strike a balance between both demand and supply support.
- ✓ They target key market failures (awareness, externalities/freeriding, coordination problems) and those groups with the greatest potential.
- ✓ They help businesses to become competitive and deliver quality.
- ✓ They limit rents in time/scope and base them on performance.



Some Key Results and Recommendations 6

- **Good practice options** for effective support instruments:
 - **Turkey:** FiTs (+ premiums for locally manufactured components) for RE guarantee fixed power purchase prices over 20 years
 - **South Africa:** capacity auctions for RE ‘reserve’ a certain capacity in the electricity grid to renewables (or a specific RE technology)



Some Key Results and Recommendations 7

- The larger the share and the greater the role of local actors, the more important become **the notions of performance and quality** and the need for the state to pro-actively support and secure them
- **Skill and capacity building at both individual and institutional levels** are particularly crucial: performance gaps need to be overcome, and quality issues need to be resolved, so that the necessary longevity and profitability of the installations can be guaranteed.
- **A clear priority should thus be given to human capital development:** this should include encouraging cooperation between education and business at both academic and TVET levels, enhancing applied research and TVET+LLL, while always considering the informal sector.



Some Key Results and Recommendations 8

- Employment-enhancing HCD policies foster a sufficiently large workforce with the right skill sets.
- ✓ Their focus, scope and sequence is in phase with the expected market development.
- ✓ The private sector is closely associated.
- ✓ Standards used are transparent, consistent, labor market-oriented
- ✓ They are effectively enforced and regularly updated.



Some Key Results and Recommendations 8

- **Good practice options** for skill building policies:
 - **China:** ILO-based skill needs assessment for RE/EE employment
 - **China, Turkey:** integration into existing university & research programs as well as the ‘normal’ vocational training system
 - **South Africa, India, Brazil:** creation of RE/EE specific training institutions & programs to rapidly build up the necessary skills



Conclusions 1

- **Employment effects of RE/EE applications vary strongly:**
 - Depending on the technology and the size of the project
 - Differing in terms of the duration and the location of the effect
 - Differing in terms of the kind of inputs and the level of skills required
 - Distributed over time and along the supply chain in different sectors
 - Varying significantly between countries, especially between OECD & emerging economies / developing countries
 - Need to distinguish direct, indirect and net (induced) effects



Conclusions 2

- **Successful countries share certain features:**
 - They develop strategic approaches to their RE/EE goals, based on an assessment of their status quo and future potentials
 - They mobilize state and non-state actors and stakeholders
 - They implement policies to develop markets and create jobs
 - They invest in HR development and capacity building to accompany the development of markets & employment
 - Enabling a co-evolution of policies, markets and technological capacities with benefits for employment and local value creation



Open questions and needs for actions

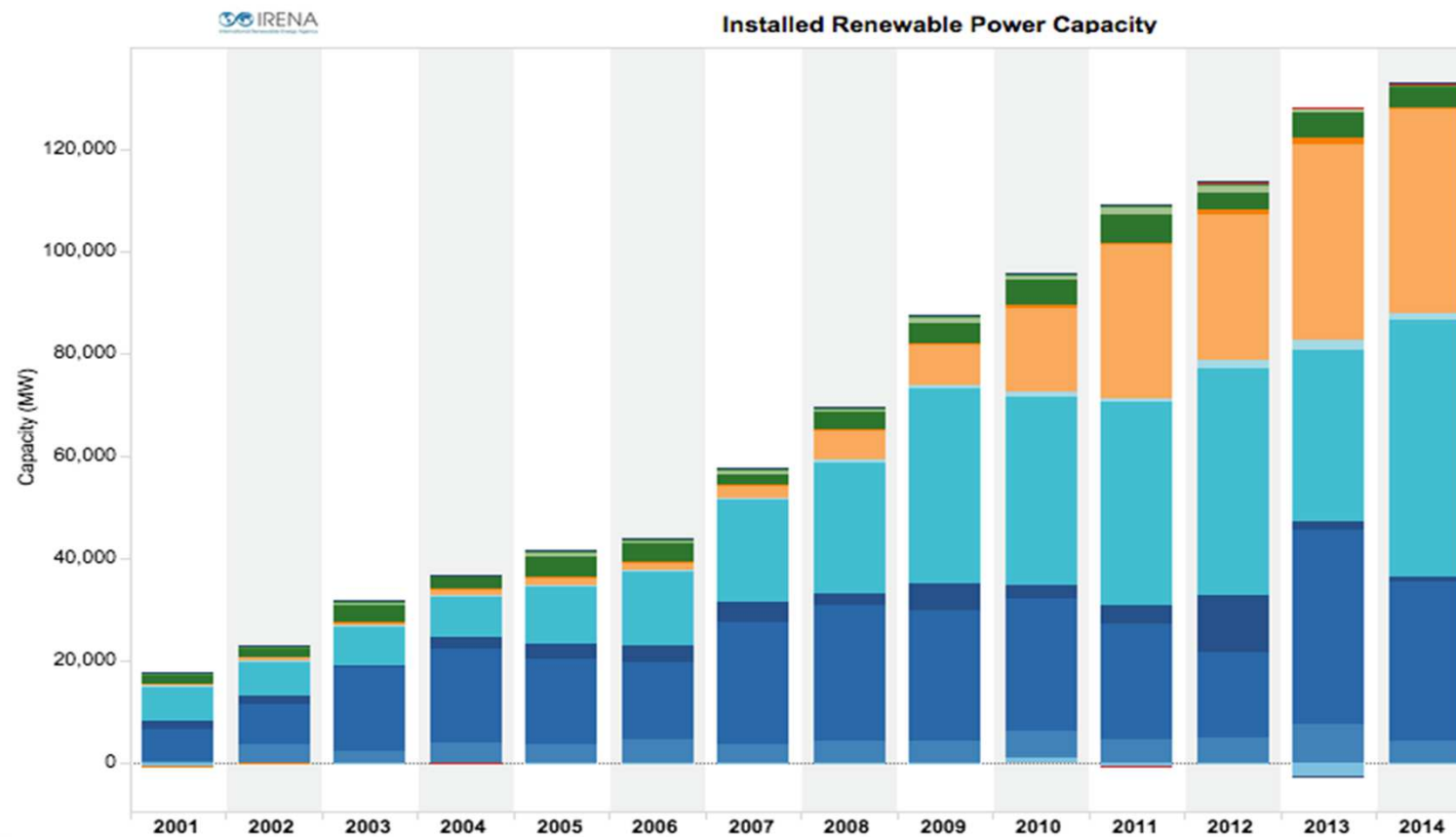
- The availability of quality data and the linkage of data to strategy development and implementation is crucial and can be further supported by targeted use of other tools such as ELMA.
- The creation of mechanisms and procedures allowing for a regular and systematic monitoring and evaluation of the progress and outcomes of policies and activities is likewise key.
- TBC...



Backup Slides

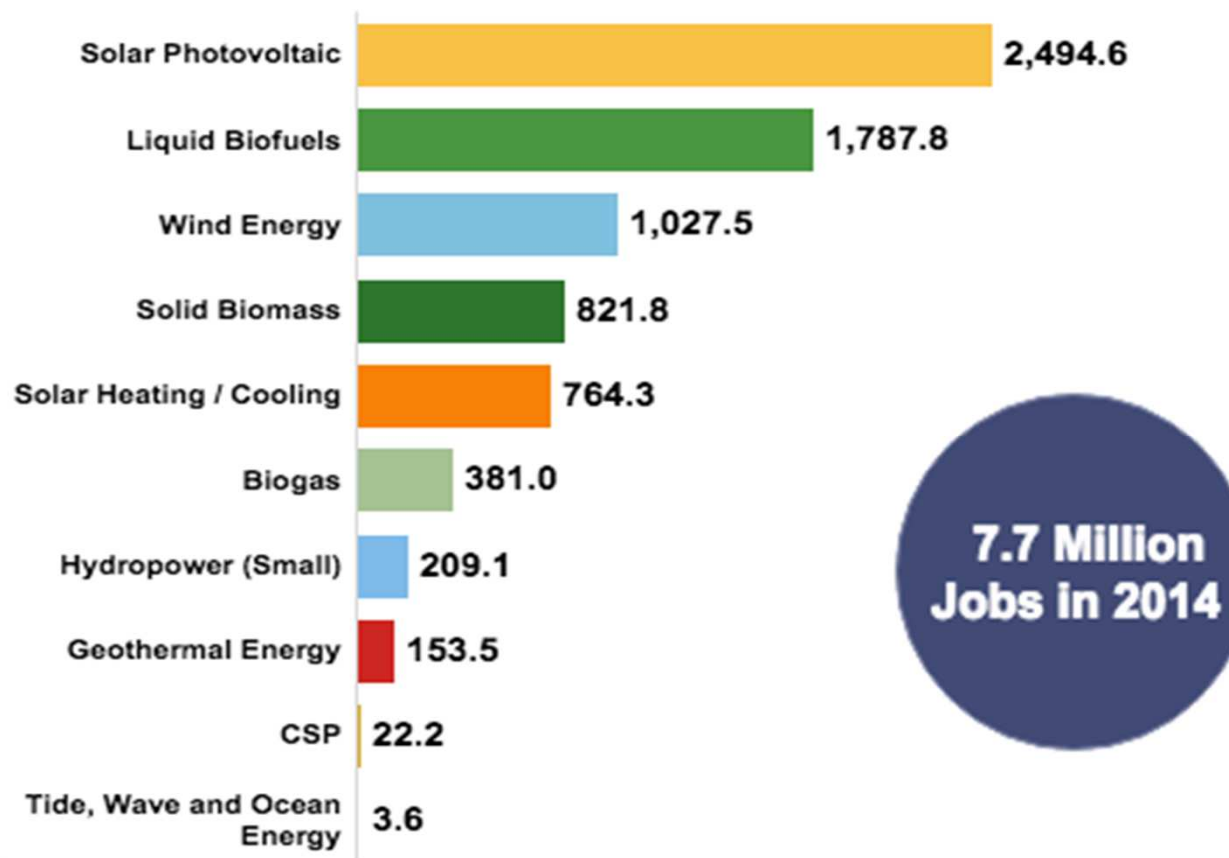


Annual Net Additions of RE Capacity Worldwide

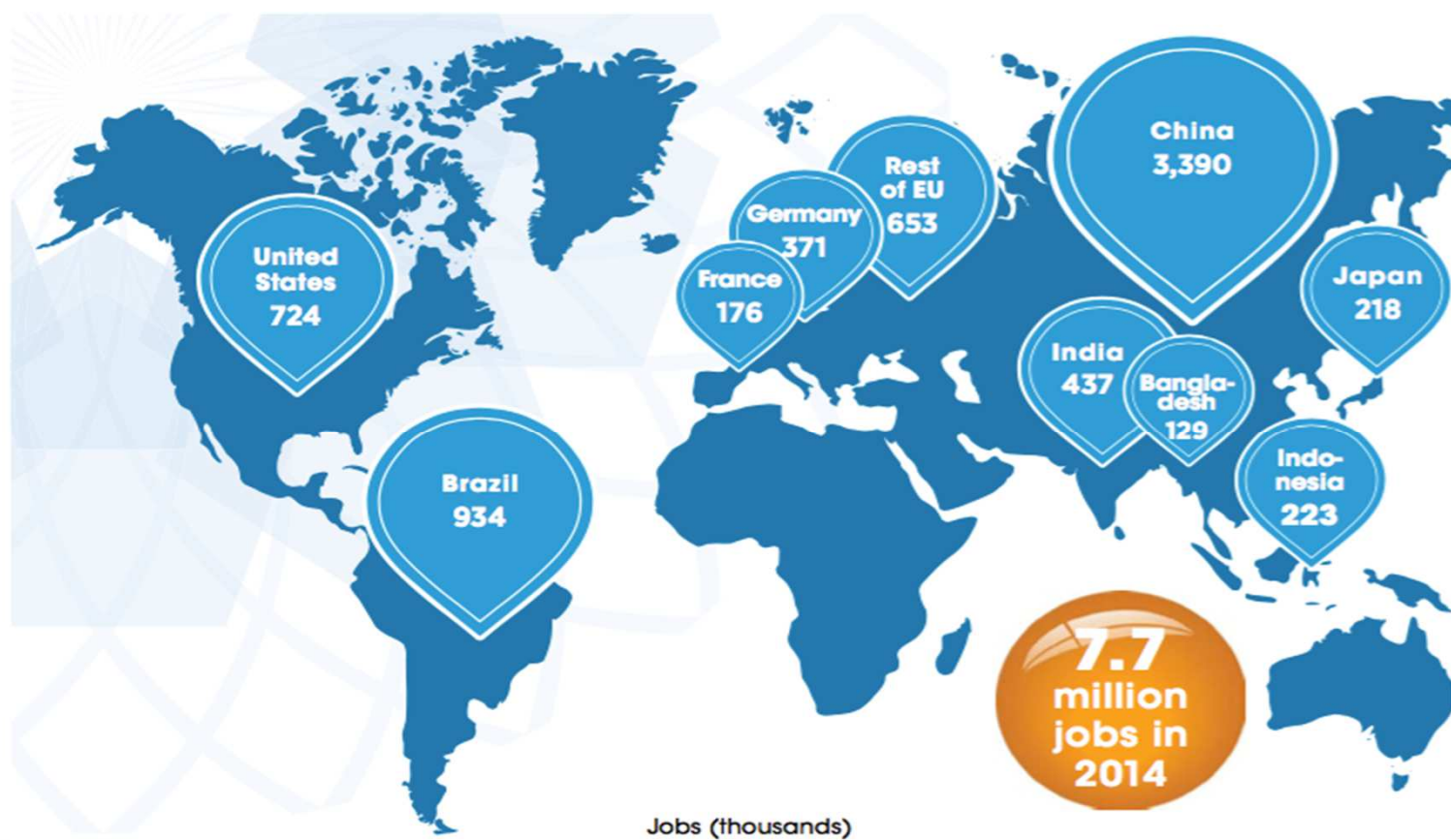




RE Employment Worldwide by Technology (in 1000's)



RE Employment Worldwide in Leading Countries (in 1000's)





RE Employment Factors by Technology and Project Phase

Option	Manufacturing (person-years/MW)	Installation (person-years/MW)	O&M (jobs/MW)
Wind			
Minimum	2.7	0.5	0.1
Median	4.0	2	0.3
Maximum	12.5	6.7	0.7
Standard deviation	3.3	2.4	0.2
Sample size ^a	8	10	16
PV			
Minimum	6.0	6.4	0.1
Median	18.8	11.2	0.3
Maximum	34.5	33.0	1.65
Standard deviation	9.3	9.7	0.4
Sample size ^a	9	9	12
CSP			
Minimum	4.0	6.0	0.2
Median	12.8	10.2	0.5
Maximum	21.6	14.4	1.0
Standard deviation	8.8	4.2	0.3
Sample size ^a	2	2	6

^a No units.